

ISSN 1045-6333

HARVARD

JOHN M. OLIN CENTER FOR LAW, ECONOMICS, AND BUSINESS

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Discussion Paper No. 569

12/2006

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Cambridge, MA 02138

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John M. Olin Center's Program on Corporate Governance

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forthcoming in EXCHANGES: CHALLENGES AND IMPLICATIONS, Euromoney 2007

Abstract

Recently there has been a dramatic change in the organizational structure of exchanges as they have demutualized and converted into “for-profit” entities. This has been accompanied by a public listing of shares on the exchange itself. These changes have been driven by technological and competitive forces and have resulted in a new paradigm for the governance of exchanges. The new organizational structure has raised several regulatory issues. At the same time that exchanges have themselves become public companies, there have also been major changes in the governance requirements of listed companies that trade on exchanges. Many of these changes have been prompted by the Sarbanes-Oxley legislation, new exchange regulations, and changes mandated by the SEC. The new requirements have impacted the capital raising process globally and the choice of listing venue. These developments have in turn intensified competition among exchanges and may lead to a wave of cross-border consolidations. Globalization of exchanges will create challenges for nation-based regulation and we offer some suggestions for resolving the regulatory impediments.

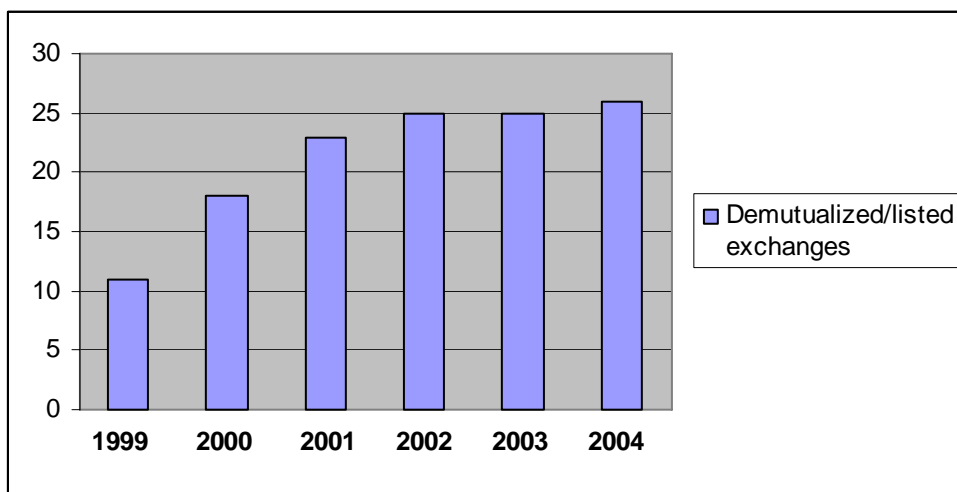
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U.S. SECURITIES REGULATION IN A WORLD OF GLOBAL EXCHANGES

Reena Aggarwal, Allen Ferrell and Jonathan Katz

I. INTRODUCTION

There has been a dramatic change in the organizational structure of exchanges as they have converted into “for-profit” entities, and this has often been accompanied by a public listing of shares on the exchange itself and cross-border exchange mergers. These changes have been driven by technological and competitive forces. In 1993, the Stockholm Stock Exchange became the first exchange to demutualize. It was followed by a wave of other exchanges, including the Helsinki Stock Exchange in 1995, the National Stock Exchange of India (created as a demutualized exchange in 1995), the Copenhagen Exchange in 1996, , the Amsterdam Exchange in 1997, the Australian Exchange in 1998, the Toronto, Hong Kong, and London Stock Exchanges in 2000, Nasdaq in 2000, the Bombay Stock Exchange in 2005, and the New York Stock Exchange (NYSE) in 2006. The stock exchanges of Brazil, Sri Lanka, Pakistan, Philippines, and South Africa have announced plans to demutualize and list their shares. At the same time, the largest derivative exchanges such as the Chicago Mercantile Exchange, the London International Financial Futures and Options Exchange (LIFFE), the Chicago Board of Trade, and Eurex are either already publicly listed or are part of publicly listed parent companies—and others, including the New York Mercantile Exchange (NYMEX) in 2006 have demutualized and went public. The clear trend towards exchange demutualization and listing can be seen in the following graph, based on the World Federation of Exchanges’ 2001-2006 annual surveys of its membership, charting the number of demutualized and listed exchanges.



The NASD restructured Nasdaq in 2000 by conducting a private placement and issuing warrants. On July 1, 2002 shares of Nasdaq started trading on the over-the-counter Bulletin Board and eventually migrated to the Nasdaq Stock Market in February 2005 after issuing shares in a secondary offering. Nasdaq acquired the BRUT ECN in 2004 and in 2005 acquired the INET ECN (owned by Instinet) for \$935 million. Nasdaq expects savings of \$100 million per year from synergies in technology, clearing, corporate overhead and market data products. Both Nasdaq and NYSE plan to enter the options business and increase the scope of the products that trade on their markets.

Regional exchanges such as the Boston Stock Exchange and the Philadelphia Stock Exchange are also transforming themselves by launching new trading platforms and forming joint ventures/strategic alliances with large firms such as Citigroup, Credit Suisse First Boston, Fidelity, Citigroup, Morgan Stanley and UBS. This trend is likely to continue in the future.

The new organizational structure of exchanges has raised several regulatory issues. Exchanges have traditionally been self-regulatory organizations (SROs) that have regulatory responsibilities for their members. Such SROs set listing standards for companies that list and

trade on the exchange, set the trading rules and conduct surveillance of market operations and periodically inspect member firm operations. Typically all of these functions are subject to the oversight of the securities commission of the country. In some countries exchanges also have the authority to license and discipline member firms and their employees. This tension between the exchange's role as a SRO and a for-profit making entity has been a cause for concern among regulators and market participants. As discussed by Fleckner (2006), a demutualized exchange wears two different hats, that of the player and referee. He argues that the concern is not that exchanges will systematically under- or over-regulate because in the long-run exchanges are concerned about their integrity and reputation. Instead, as discussed in several papers, the concern is that for-profit publicly traded exchanges will be lenient in regulating themselves and use its regulatory powers to gain an unfair advantage over competitors.¹

The incentives of the owners of demutualized exchanges are discussed by Ferrell (2006). He argues that there are two potential sources of distortion in the owners' incentives. The first potential source is related to the market power of existing exchanges that have already captured a significant portion of trading volume in a particular security. Competitors will sometimes need quotation data from the incumbent exchange in order to generate prices on their own venue and thereby compete. The second potential source of distortion arises from possible externalities related to order exposure and to price discovery.²

¹ See Reena Aggarwal, *Demutualization and Corporate Governance of Stock Exchanges*, 15 J. Applied Corp. Fin. 105 (2002); Caroline Bradley, *Demutualization of Financial Exchanges: Business as Usual?*, 21 Nw. J. Int'l L. & Bus. 657 (2001); Roberta S. Karmel, *Demutualization of Exchanges as a Strategy for Capital Market Regulatory Reform*, in *Focus on Capital: New Approaches to Developing Latin American Capital Markets* 269 (Kenroy Dowers & Pietro Masci eds., 2003); Roberta S. Karmel, *Turning Seats into Shares: Causes and Implications of Demutualization of Stock and Futures Exchanges*, 53 Hastings L.J. 367; Ruben Lee, *Changing Market Structures, Demutualization and the Future of Securities Trading*, in *Brookings-Wharton Papers on Financial Services* 283 (Robert E. Litan & Richard Herring eds., 2003); Lee, *The Future of Securities Exchanges*, *supra* note 4; Amir N. Licht, *Stock Exchange Mobility, Unilateral Recognition, and the Privatization of Securities Regulation*, 41 Va. J.Int'l L. 583 (2001); Jonathan R. Macey & Maureen O'Hara, *From Markets to Venues: Securities Regulation in an Evolving World*, 58 Stan. L. Rev. 563 (2005).

² For details see, Allen Ferrell, "Demutualization and Exchange Owners' Incentives," Working Paper, Harvard Law School.

The use of market power and regulatory authority for competitive advantage is not a new phenomenon. Historically, it was not uncommon for not-for-profit exchanges to adopt rules designed to prevent competition from other exchanges.³ Even recent regulatory initiatives such as Reg NMS that are designed to promote inter-market competition have tended to focus only on price improvement. Established exchanges have asserted a form of commercial proprietary ownership in order flow submitted to it. Thus it should retain order flow even in the face of a superior bid/offer on another trading platform, if it matched the best available price on a competing market. Under Reg NMS, if an exchange matches the best bid or offer price, it has no obligation to transfer the trade to the exchange that had the best price first (“price time priority”).

At the same time that exchanges have themselves become public companies, there have also been major changes in the disclosure and governance requirements of public companies, that may be influencing a company’s decision on where and whether to go public. Many of these changes in the U.S. have been prompted by the Sarbanes-Oxley legislation, new exchange regulations, and changes mandated by the U.S. SEC. The new requirements have impacted the capital raising process globally and the choice of listing venue. These developments have in turn intensified competition among exchanges, and may lead to a wave of cross-border consolidations by exchanges and other trading platforms.

The likely emergence of “global” exchanges that are the product of these cross-border mergers raises the pressing question of how these global exchanges are going to be regulated. This issue has been brought powerfully to the fore as a result of the pending NYSE-Euronext merger. Will one country’s regulator regulate these global exchanges? Will each subsidiary

³ At one time New York Stock Exchange rule 390 required member firms to execute transactions in an NYSE listed company only through the NYSE or another exchange. Another former NYSE rule required a supermajority vote of all shareholders before a company could delist from the NYSE, preventing NYSE listed companies from delisting and listing on another exchange.

market be regulated separately by a nominal home nation regulator applying different standards? Will national regulators develop coordinated regulatory systems based upon shared mutual principles of regulation and mutual deference to coequal regulators? What is the regulatory regime of companies, often multinational companies, that list on these global exchanges? How is the resolution of these regulatory issues impacting the organizational structure of cross-border exchanges?

Based on the changing nature of financial exchanges, the United States SEC has proposed new corporate governance, transparency, oversight and ownership rules for SROs⁴ and issued a concept release examining the efficacy of SROs.⁵ The concept release states that,

“... the advent of for-profit, shareholder-owned SROs has introduced potential new conflicts of interest and issues of regulatory incentives. In addition, recent failings or perceived failings with respect to SROs fulfilling their self-regulatory obligations have sparked public debate as to the efficacy of the SRO system in general.”

This paper is organized as follows. In Section II, we describe the competitive environment facing exchanges. In Section III, we discuss the governance of exchanges. Section IV analyzes the issues that arise in connection with the regulation of global exchanges. Finally in Section V we provide our conclusion and some suggestions for resolving the regulatory impediments to the emergence of truly global exchanges.

II. THE COMPETITIVE ENVIRONMENT

Beginning in the 1980s traditional stock exchanges have faced increasing national and global competition for both order flow and listings from a number of directions. This competition has come from established stock exchanges that were revitalized by the transition

⁴ Securities and Exchange Commission Release No. 34-50699. File no. S7-39-04,

⁵ Securities and Exchange Commission, Release No. 34-50700; File No. S7-40-04, Concept Release Concerning Self-Regulation.

from trading floor based exchanges to electronic systems, the creation of alternative trading platforms possessing unique trading features that carved out market niches or offered faster execution or lower transaction costs, and the numerous stock exchanges that were created around the world following the demise of the communist economic system in the late 1980s and early 1990s.

This increase in competing markets was made possible primarily as the result of the dramatic decrease in the fixed costs associated with establishing a securities market. Advances in computing capacity and telecommunications efficiency made “virtual trading floors” a reality. An exchange today is often a network of servers with telecommunication linkages to broker-dealers, investment banks and other market participants. In the United States, these electronic markets are called electronic trading networks (ECNs) or alternative trading systems (ATSs).

Also promoting competition and reducing costs were significant regulatory initiatives that reduced or eliminated the self-regulatory obligation of new competitors (Reg ATS for ECNs in the U.S.) or permitted greater regulatory flexibility in accepting listings (such as the A.I.M. in London and the original NASDAQ Bulletin Board experiment in the U.S.). New regulations, such as Reg. 144A and Reg. S in the U.S., enabled institutional investors to invest globally and in unlisted securities and made it easier for U.S. companies to offer securities globally. The adoption of the European Union’s Market in Financial Instruments Directive (MiFID) has caused a consortium of seven large investment banks – Citigroup, Credit Suisse, Deutsche Bank, Goldman Sachs, Merrill Lynch, Morgan Stanley, and UBS – to announce that they will form a new company that will develop a pan-European equity trading platform that will compete with the European exchanges. A spokesperson for the consortium explained that “We are responding to the MiFID legislation by creating an integrated pan-European trading platform where equities

can be traded more cost effectively, obtaining significant liquidity with greater efficiency for each and every participant in the equity markets.”

Under Regulation ATS, ATSS had the option to register as an exchange or as a broker-dealer.⁶ Registration as a broker-dealer eliminated the statutory obligation to become a self-regulatory organization, with the attendant cost burden. In the new environment, ATSS formed alliances with exchanges in order to combine the regulatory status of the exchange with the trading platforms of ECNs. The ECN benefited as it did not have to build regulatory costs into its business model and the exchange benefited from the transaction and market data fee revenues generated by the ATSS. ECNs started executing and reporting trades through particular exchanges and sharing in data revenues. The interest of the traditional exchanges in the U.S. in establishing such alliances or outright mergers with ECNs has only increased as a result of Regulation NMS, which confers a regulatory benefit on exchanges that have automated access to their quotations. Paradoxically, some ECNs claim that Reg. NMS, and the SEC’s previous order handling rules, has adversely affected their business model by requiring them to provide non-members with access to its quotes.

Another deregulatory initiative that encouraged global competition was the relaxation in the U.S. of disclosure and listing obligations on foreign companies interested in listing. As of the end of 2005, 453 foreign private issuers from 47 countries were listed on the New York Stock Exchange, representing more than 37% of total NYSE market value.⁷ Following the enactment of the Sarbanes-Oxley law, however, this trend abruptly shifted. While there has not been a wave of delistings, there has been a drop in new listings. Instead, markets in Europe and Asia have become popular alternatives for new listings.

⁶ See US SEC Regulation ATS, 17 CFR 242.300, *et seq.*

⁷ Comment letter dated March 10, 2006 of Mary Yeager, Assistant Secretary, New York Stock Exchange to Nancy Morris, Secretary SEC. Available at <http://www.sec.gov/rules/proposed/s71205/myeager031006.pdf>.

Because of this enhanced ability by companies to issue securities globally and the freedom of investors to invest globally, competition is no longer confined to a country's boundaries. Differences in a country's regulatory regime are therefore part of the competitive landscape. Exchanges in different countries operate under the regulatory regime of their own country and these regulations can differ considerably. For example, firms listed on U.S. stock exchanges must comply with the exchange's listing requirements and with U.S. SEC disclosure regulations, as well as the internal control requirements of Sarbanes-Oxley. There is some evidence to suggest that this has deterred some foreign firms from listing in the U.S. and has hampered the IPO activity in the U.S.⁸ By going public and listing on a foreign market the stocks in these firms can trade in foreign markets and even on ECNs, while still gaining access to U.S. institutional investors via rule 144A private offerings. The ability of institutions to invest globally has diminished the traditional liquidity advantages of the U.S. markets.

The freedom of institutional capital to trade on competing markets, the rise of sophisticated ECNs, the elimination of SRO trading rules that prohibited member trading on other platforms and the adoption of regulations that require firms to trade for clients at the best price, regardless of the market, has reduced the ability of a single stock exchange to dominate trading in its own listings. Even if a stock is listed on an exchange, considerable trading activity can occur on other trading venues. For example, NYSE trades less than 80% of the volume in its listed stocks while AMEX handles 21% of the volume for AMEX-listed stocks. More than 50% of Nasdaq volume is accounted for by automated order-driven systems such as SuperMontage and the ECNs rather than the traditional market makers.

⁸ Charles Niemeier, a member of the PCAOB, offers a slightly different interpretation of this trend. He suggests that the statistics don't support an exodus from the U.S. markets and that a key competitive advantage in foreign listing arises from the substantially lower underwriting fees charged outside of the U.S. http://www.pcaob.org/News_and_Events/Events/2006/Speech/09-30_Niemeier.aspx

In this highly competitive environment, stock exchanges have responded by developing multiple trading platforms or acquiring trading facilities that are operated by entities other than the self-regulatory organization (SRO) charged with regulating the market. For example, the Pacific Stock Exchange formed PCX Equities which became the first for-profit stock exchange in the U.S. in May 2000. It then entered into an agreement with the ECN Archipelago to provide the Arca-Ex trading platform to trade its equities. Similarly, the day-to-day operations of the Boston Options Exchange (BOX) are managed by the Boston Options Exchange Group LLC. This Group is itself owned by the Boston Stock Exchange Inc., the Montreal Exchange Inc. and a group of broker/dealers including Interactive Brokers, Crédit Suisse First Boston, UBS, Citigroup, JP Morgan Chase and Morgan Stanley.⁹ The regulatory and SRO tasks are managed by the Boston Stock Exchange via a wholly-owned subsidiary, BOX-R LLC which is responsible for the surveillance operations and other regulatory responsibilities.

The new competitive environment has led to innovation and reduced costs. However, there are concerns that this has placed undue strains on the regulatory structure. These issues have included the concern that trading might move to markets with lower regulatory requirements, the existence of inconsistent rules across markets, and that exchanges may reduce the rigor of their regulatory oversight in order to gain market share. There is also the concern that exchanges may be “too soft in regulating themselves and too severe in regulating competitors.”¹⁰ For example, the SEC in its concept release, and in an earlier concept release, discussed the possibility of regulatory arbitrage, whereby, for example, an exchange might reduce its market surveillance function to attract trading volume, or lower listing requirements to attract companies. While these concerns were theoretical, there has in fact been an instance where an

⁹ <http://www.bostonoptions.com/ove/ope.php>

¹⁰ Fleckner, Andreas M., "Stock Exchanges at the Crossroads" . Fordham Law Review, Vol. 74, p. 2541-2620, 2006 Available at SSRN: <http://ssrn.com/abstract=836464>

SRO failed to pursue a member firm's misconduct and the SEC order imposing sanctions indicated that this may have been because the firm was a critical component of the SRO's business model to generate market data revenue vital to the SRO.¹¹

Some of the competitive pressures have led exchanges to demutualize and this exchange structure has led to further competition. The recently announced merger of NYSE and Euronext and Nasdaq's acquisition of a large stake in the London Stock Exchange could mark the start of a new wave of consolidation involving mergers, acquisitions and alliances across national borders resulting in the rise of global exchanges.

The global movement of traditional stock exchanges to for-profit businesses has exacerbated these pressures. A for-profit stock exchange, burdened with expensive regulatory duties, and competing with trading platforms that have lower regulatory burdens or no regulatory duties must grow its business to be successful. As with any business, profit growth may come from increased revenues or reduced costs. For a stock exchange, revenue growth must come from increased trading volume, by adding new listings or by acquiring other exchanges or trading platforms.¹² Cost reduction may come from a reduction in regulatory burdens or through economies of scale, such as the consolidation of separate market surveillance units and operating acquired trading platforms on existing surplus IT capacity. This emerging business dynamic may be driving a variety of fundamental changes in global regulation.

III. GOVERNANCE OF EXCHANGES

A. Self-Regulatory Function

¹¹ "It is also possible that the business interests of the Nasdaq InterMarket, which had the goal of increasing its market share of Tape B trades, may have contributed to a failure by InterMarket personnel to appreciate the implications of the trading pattern they observed." <http://www.sec.gov/litigation/investreport/34-51163.htm>.

¹² The SEC concept release on self-regulation, identified several revenue sources for trading systems: Regulatory fees, Transaction fees, Listing Fees, Market Data fees and various minor miscellaneous fees.

Regulation of capital markets around the world often rely on the principle of self-regulation. The concept of self-regulation reflects the historical reality that stock exchanges in the U.S., England and other nations operated successfully before there was any direct governmental oversight. They were organized as membership organizations which established membership requirements, minimum standards for companies to list on the exchange, capital adequacy standards and minimum commission rates for member firms, trading rules and disciplinary procedures in the case of violations by members. In the United States these principles were codified by Federal law. The Securities Exchange Act of 1934, which created the S.E.C., required all stock exchanges in the U.S. to register with the SEC. SEC approval of the registration required a determination that the exchange is organized and has the capacity to carry out the purposes of the act and to comply and enforce compliance by its members with the act.¹³

The dual regulation by governmental body and industry organization has continued within the U.S. and the principle has been exported to other countries, in greater or lesser degree. Hence, even though a securities commission normally has the ultimate responsibility for regulating exchanges and their participants, exchanges can play an important role in regulating the markets. Exchanges are considered closer to the marketplace and serve as self-regulatory organizations (SROs). SROs are on the front-line and are able to benefit from the expertise of industry professionals. As a private organization, an SRO is able to directly raise funds from the industry, is not subject to governmental restrictions on the number of employees it may hire and on the salaries it can pay. Also, an SRO is not subject to election year changes in policy, revolving door leadership and staff turnover. This results in a greater degree of regulatory stability and the benefits resulting from retention of experienced and talented staff. This model of regulation reduces the resources required for direct regulation by a securities commission.

¹³ 17 USC 78(f)

While the history of self-regulation in the U.S. is long, it is not without controversy and scandal. The fundamental conflict created by an organization of competitors policing itself is not just a recent by-product of the transition to for-profit exchanges. Almost immediately after its creation, the SEC was confronted with a scandal at the New York Stock Exchange, which raised questions as to the efficacy of industry self-regulation. In 1937, Richard Whitney, the President of the New York Stock Exchange was found to have misappropriated large sums from the NYSE “widows and orphans” fund to save his own brokerage firm. In a pattern that would be repeated several times, this scandal provided the SEC with the leverage needed to require the NYSE to reorganize itself and strengthen the independence of its Board of Directors. Similarly, scandals at the American Stock Exchange in the late-50’s, at the NASD in the mid-90’s and most recently at the New York Stock Exchange provided the impetus for the SEC to prod the industry dramatically to reorganize exchange governance as a solution to collusive industry activities that undermined the integrity of the exchange.

Policymakers have long looked to a strong corporate governance structure to balance the inherent conflicts within an SRO. In the U.S., Congress specified in the 1934 Act that a registered exchange “assure a fair representation of its members in the selection of its directors and ... provide that one or more directors shall be representative of issuers and investors and not be associated with a member of the exchange, broker or dealer.”¹⁴ The recent attention to SRO governance as a response to changes in exchange structure, market competition, weaknesses in SRO regulatory programs and the most recent cycle of scandals continues this tradition. In 2003, William Donaldson, the Chairman of the SEC (and formerly a President of the New York Stock Exchange) noted that the SROs “play a critical role in our securities markets as standard setters for listed companies, operators of trading markets, and front-line regulators of securities

¹⁴ 17 USC 78(f)(b)(3)

markets” and asked the SROs to review their own governance practices.¹⁵ This review made sense particularly in a period when the exchanges were requiring enhanced governance standards of firms listed on the exchange.

B. For-Profit Structure

With this history, it is understandable that when the migration to for-profit exchanges accelerated, regulators looked to reform of governance as a solution to the inherent conflict between a business objective of maximizing exchange profits and a legal duty to perform expensive regulatory oversight functions.

The SRO role of exchanges has created concerns due to the fact that exchanges have demutualized and become publicly-traded companies. Demutualization has resulted in the separation of the right to trade on an exchange from the ownership rights of an exchange. Historically exchanges were organized as mutual, non-profit organizations owned by members but the new structure means a new constituency, in the form of shareholders, that will naturally be interested in promoting business interests. For a long time the NYSE argued that a well-regulated market is a hallmark of the franchise and therefore demutualization does not create any conflicts, but rather aligns the SRO regulatory obligations with the exchange’s commercial interests. At the same time, NASDAQ has for several years publicly identified the competitive disparity between an SRO, burdened with regulatory expenses, and an ECN, operating free of SRO obligations.¹⁶

¹⁵ SEC File No. S7-39-04.

¹⁶ In 2002, NASDAQ highlighted this problem. “Moreover, Nasdaq continues to pay virtually all costs involved in regulating trading in Nasdaq securities, even though a significant portion of that trading does not take place on Nasdaq. Nasdaq cannot long sustain a business model where it subsidizes the regulatory costs of its competitors.” <http://www.sec.gov/news/extra/mktstr-invites/nasdaq102902.htm>

Because regulators and market participants have been concerned by the actual or perceived conflicts of interest and the possibility that SROs might put their commercial interests ahead of their regulatory responsibilities, they have insisted upon structural change and governance changes as a condition to becoming a for-profit exchange.¹⁷ In the U.S., the two primary exchanges the NYSE and NASDAQ have both adopted structures in which the self-regulatory functions are in separate subsidiaries, with separate boards. The performance of regulatory functions is governed by a contractual agreement between the for-profit exchange and the regulatory unit. Limits on member ownership have been adopted and procedures for dealing with exchange “self-listings” have been put into place.

At the NYSE, the board is now comprised exclusively of independent directors. A separate advisory board of industry representatives has been created to periodically meet with the Board to ensure sufficient industry input into exchange policy. But this advisory board has no voting authority and the actual board is required to meet periodically without participation from the advisory board. While the NASD structure does not require an exclusively independent board, it is required that the number of non-industry directors equal or exceed the combined number of member-representative directors and industry directors.¹⁸ This conflict is evident in the demutualization process of several exchanges globally. For example, on November 1, 2001 the Tokyo Stock Exchange demutualized and changed its name to the Tokyo Stock Exchange, Inc. However, its planned listing has been postponed due to delays that are partially due to

¹⁷ These issues have been discussed in several papers including: Reena Aggarwal, *Demutualization and Corporate Governance of Stock Exchanges*, 5 J. Applied Corp. Fin. 105 (2002); Andres M. Fleckner, *Stock Exchanges at the Crossroads*, Fordham Law Review, Vol. 74, p. 2541-2620, 2006; Roberta S. Karmel, *Turning Seats into shares: Causes and Implications of Demutualization of Stock and Futures Exchanges*, 53 Hastings L.J. 367 (2002) Amir N. Licht, *Stock Exchange Mobility, Unilateral Recognition, and the Privatization of Securities Regulation*, 41 Va. J. Int'l L. 583 (2001); Benn Steil, *Changes in the Ownership and Governance of Securities Exchanges: Causes and Consequences*, in Brookings-Wharton Papers on Financial Services, *supra* note 1, at 61.

¹⁸ SEC Release No. 34-53128, January 13, 2006. Order Approving Application of The Nasdaq Stock Market LLC for Registration as a National Securities Exchange.

disagreements between the exchange and the Financial Services Agency (FSA) over the exchange's management structure as a listed entity. The regulator had demanded that the exchange separate its regulatory division from the stock trading-related division.

When the SEC issued a concept release in 2004 to discuss possible new approaches to self-regulation two of the four identified objectives pertained to SRO governance and the protection of funding for regulatory functions:

(1) the inherent conflicts of interest between SRO regulatory operations and members, market operations, issuers, and shareholders; ...

(2) the funding SROs have available for regulatory operations and the manner in which SROs allocate revenue to regulatory operations.¹⁹

C. Separation of Market Operations and Regulatory Functions

In order to address the conflicts of interest issues associated with the organizational structure of exchanges U.S. exchanges will be required, in the SEC's proposed governance rules, to separate market operations and commercial interests from regulatory functions.²⁰ This separation can either take place at the functional-level or the organizational-level. Self-regulation is based on the premise that regulation works best when it is close to market activity. However, it has also been felt that regulatory activities need to be isolated from market activities.

The merger between the New York Stock Exchange and Archipelago Holdings, Inc. resulted in the NYSE Group, Inc., a publicly traded holding company. This company is the owner of the New York Stock Exchange LLC, a company that succeeds the New York Stock Exchange. To avoid conflicts of interest, the NYSE Group has created a not-for-profit corporation, NYSE Regulation, Inc., with the New York Stock Exchange LLC as the sole equity

¹⁹ <http://www.sec.gov/rules/concept/34-50700.htm#III>

²⁰ NASDAQ continues to perform some market surveillance functions within the exchange subsidiary.

member of NYSE Regulation. This new corporation performs all the SRO regulatory responsibilities currently conducted by the NYSE, as well as the regulatory responsibilities of NYSE Arca which is also a SRO, and will be funded from two sources. First, NYSE Regulation has contractual relationships with the two SROs, the NYSE and the Archipelago marketplaces, in which NYSE Regulation agrees to regulate these markets, and thereby fulfill their SRO responsibilities in exchange for various fees. In addition, the NYSE Regulation is the recipient of regulatory fees imposed on the membership of the NYSE and Archipelago markets. The NYSE believes that “This organizational structure preserves and extends the separation yet pervasive communication between business and regulatory activities achieved under the NYSE’s previous governance architecture that was comprehensively reformed in 2003. It also seeks to insulate NYSE Regulation from the additional crosscurrents created by public ownership.”²¹

The chief executive officer of NYSE Regulation has primary responsibility for the regulatory oversight of NYSE Group and its exchange subsidiaries, and reports to the NYSE Regulation board of directors. NYSE Regulation includes divisions such as Market Surveillance, Member Firm Regulation, Enforcement and Listed Company Compliance among others. The Board consists of:

- Five directors with no affiliation to NYSE Group board nor any listed company or member organization;
- Three directors who are also NYSE Group directors;
- One management director who serves as the chief executive officer of NYSE Regulation.

NYSE Group’s chief executive officer does not have a seat on the NYSE Regulation board.

D. Board and Committee Structure

²¹ <http://www.nyse.com/about/nyseviewpoint/1097788616359.html>

Listed-exchanges have higher governance standards than those applicable to listed companies on the exchange. This reflects the unusual combination of conflicting objectives of an exchange compared to an ordinary company. While an ordinary company has a legal responsibility to its shareholders to make a profit, an exchange has a regulatory function, an obligation to member firms and to listed companies, as well as a duty to maximize profits and shareholder value. These responsibilities are compounded by the higher standards for public companies' boards adopted following enactment of Sarbanes-Oxley. Under the new regulations adopted in 2003, all listed companies must have a board that is composed of majority independent directors. This is applicable to exchanges also. In addition key board committees, including the nominating, audit and regulatory oversight committees, must be composed solely of independent directors.

Other exchanges around the world have also adopted, often in response to exchange demutualization, governance requirements focused on board and committee structure. For instance, the Toronto Stock Exchange must have on its board of fifteen, seven directors who are independent directors. The Hong Kong Exchange board must have a majority of directors that are "public interest" directors.

E. Limitations on Ownership and Voting

Exchanges are also required to limit ownership and voting by broker-dealers. Historically exchanges were member-owned organizations but demutualization has raised the concern that a member's self-interest could compromise the self-regulatory function if a member controls a significant stake in its regulator. For example, an exchange might not diligently monitor a member's trading if the member is a controlling shareholder. The SEC has proposed that no one broker-dealer may own more than 20% in an exchange of which it is a member.

Many exchanges around the world have ownership limits, often capping ownership by a single entity at 5%. For instance, the Singapore and Philippine Stock Exchange cap ownership by a single entity, absent a regulatory waiver, at 5%.

F. Listing of Affiliated Securities

Listing of securities issued by an exchange or its affiliate on its own market creates new potential conflicts of interest. Conflicts regarding “self-listings” raise concerns as to an exchange’s “ability to independently and effectively enforce its own or the Commission’s rules against itself or an affiliated entity, and thus comply with its statutory obligations.” If the security of the exchange or its affiliate is not in full compliance with the rules of the exchange there might be the possibility that such issues would be ignored. Securities of competitors might be listed, and therefore regulated, by the exchange that might also cause conflicts of interest.

In the United States, under listing rules, the securities of exchanges and affiliates can trade and hence self-listings are allowed. However, the SEC has put additional safeguards in place in the form of proposed Regulation AL. The exchange’s Regulatory Oversight Committee must certify that the securities satisfy the SRO’s listing criteria before the securities can be listed. The exchange is also required to file a quarterly report with the SEC summarizing monitoring of the affiliated security’s compliance with listing rules and surveillance of trading. This report must be approved by the Regulatory Oversight Committee. In addition, an annual report prepared by a third party will need to be filed.²²

Many countries, concerned with potential conflicts of interest, require that self-listed exchanges be supervised by a governmental regulator rather than by the exchange itself. This is

²² For details see, <http://www.sec.gov/rules/proposed/34-50699.htm>

true, for example, of the Australian Stock Exchange, the Hong Kong Stock Exchange, the Singapore Exchange and the Stockholm Stock Exchange.

IV. REGULATION OF GLOBAL EXCHANGES: THE PENDING NYSE-EURONEXT MERGER

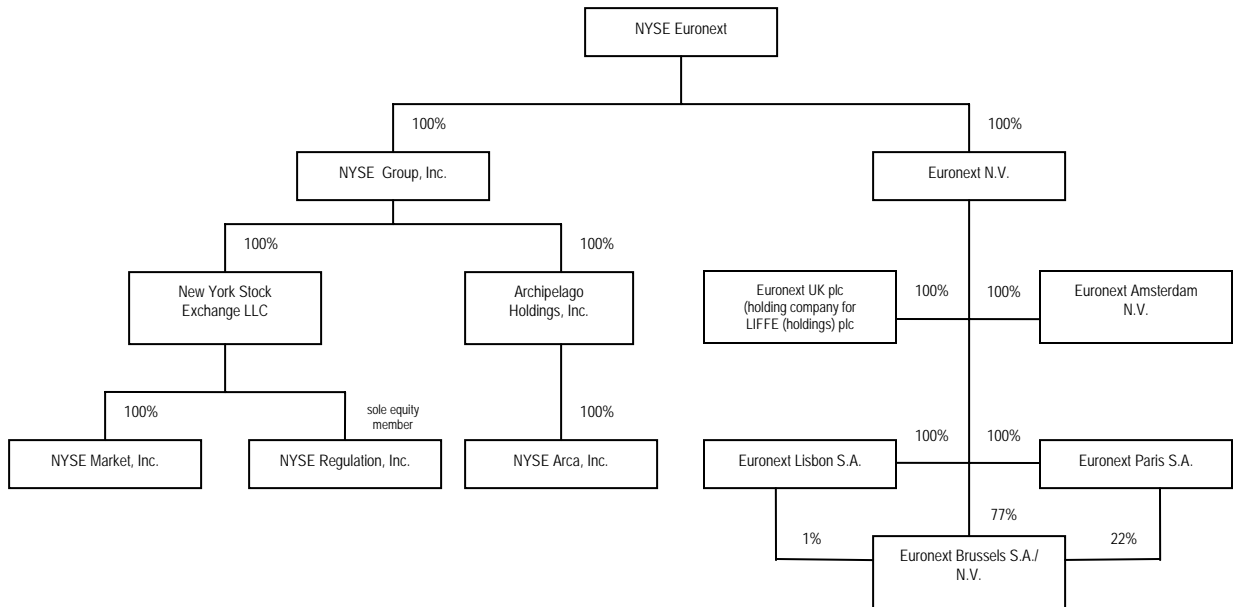
Cross-country mergers between exchanges are following close on the heels of the organizational transformation of exchanges. Indeed, demutualization coupled with a public listing is often undertaken with an eye towards future mergers as a merger of a non-profit, membership-owned exchange with a for-profit, shareholder-owned exchange can be extraordinarily difficult if not impossible. These cross-border mergers have several potential benefits: cost savings; increased liquidity; reducing the transaction costs of purchasing foreign securities; and diversification of the exchange's business into new product areas. The CEO of NYSE has stated that the NYSE considers the proposed merger of the NYSE with Euronext to be a partial solution to the migration of new listings away from New York to other markets, in particular the London Stock Exchange.

The most dramatic example of a cross-border merger is the proposed merger of Euronext and the NYSE Group. Euronext itself is the result of a series of mergers of numerous European exchanges. The merger of NYSE Group and Euronext will be consummated by combining their businesses into a new holding company structure. Under the terms of the merger agreement, as detailed in the NYSE Euronext's Form S-4 registration statement, Euronext NV and the NYSE Group will be distinct corporate entities both being owned by a U.S. holding company named NYSE Euronext. Euronext NV will not register as a U.S. securities market and, therefore, will not be a SRO under the Exchange Act of 1934. Rather, Euronext NV itself will own subsidiaries consisting of the various Euronext markets: Paris, Brussels, Amsterdam, Lisbon exchanges and

Euronext UK (the holding company for LIFFE which is a market for financial and commodity derivatives). In addition, Euronext NV will own 51% of MTS, an electronic trading platform for European fixed-income securities. These various Euronext markets are currently regulated, and will continue to be so regulated, by the various European national governments in which these exchanges operate as well as pursuant to the European Union directives in the financial services area. The most important of these directives is the Market in Financial Instruments Directive which eliminated national rules requiring concentration of trading on designated national exchanges and imposes new transparency and best execution requirements on market participants.

The NYSE Group, on the other hand, will own the New York Stock Exchange Market and NYSE Arca, which runs the Archipelago market, as subsidiaries. Both the New York Stock Exchange Market and NYSE Arca will continue to be registered exchanges with the SEC. Their regulatory responsibilities as a result of being registered exchanges and SROs will continue to be performed by NYSE Regulation, a separate subsidiary with its own board of directors. The operations and funding of NYSE Regulation are expected to be unaffected by the proposed merger.

The organizational structure of NYSE Euronext is summarized in the chart below drawn from the NYSE Euronext Form S-4 registration statement:



There has been a great deal of concern throughout Europe that the Euronext markets, and the companies listed and traded on these markets, will potentially be subject to U.S. securities law, in particular the requirements of the Sarbanes-Oxley Act, as a result of the merger. The stakes are high. If the Euronext markets had to register as an exchange with the SEC, this would create a whole host of new and extensive obligations for these markets. The Euronext markets, for one, would have to submit to the SEC its rules and rule changes for approval, ensure compliance by its members with the myriad provisions of the Exchange Act, and comply with SRO governance requirements. Registered U.S. exchanges also have to comply with Regulation NMS, which includes the so-called trade-through rule. The trade-through rule prohibits trades that occur at prices inferior to quotations that are immediately accessible through automatic execution.

Moreover, if the Euronext markets were registered exchanges than any firm listed on a Euronext market would have to register its securities with the SEC, as a result of section 12 of the Exchange Act, and thereafter comply with the reporting requirements of the Exchange Act. In addition, any firm listed on a registered exchange would have to comply with Sarbanes-Oxley,

including the burdensome internal control provisions of section 404. Finally, the trade-through rule of Regulation NMS applies to securities listed on registered exchanges.

Even if the Euronext markets did not have to register with the SEC as an exchange, a firm listed on Euronext could nonetheless be required, again pursuant to section 12 of the Exchange Act, to register its equity securities, and subject the company to periodic disclosure rules, with the SEC if there are more than 500 owners of record of the company's equity securities worldwide, with 300 of those investors being in the United States, with the company having more than \$10 million in assets. A company with registered securities, in turn, is subject to various regulations pursuant to the Exchange Act of 1934, including Sarbanes Oxley obligations.

However, the application of U.S. securities law to the Euronext markets or its listed companies is highly unlikely. The SEC has provided assurance that the NYSE-Euronext merger will not automatically result in U.S. securities law being imposed on foreign markets and firms. The SEC staff issued a June 16, 2006 fact sheet explaining that a "non-U.S. exchange would only become subject to U.S. securities laws if that exchange is operating within the U.S., not merely because it is affiliated with a U.S. exchange." Moreover, the SEC staff went on to state, that "joint ownership of a U.S. exchange and a non-US exchange would not result in automatic application of U.S. securities regulation to the listing or trading activities of the non-U.S. exchange."

More specifically, companies listed and traded on the Euronext market can avoid having to register, and thereby largely escape U.S. securities law, by relying on Rule 12g3-2(b) of the Exchange Act.²³ Rule 12g3-2(b) provides an exemption from the registration requirements of the Exchange Act and, perhaps most importantly, from the provisions of Sarbanes-Oxley. Non-

²³ The SEC proposed significant amendments to this rule in 2006 and announced that it would consider adoption of the proposal at a public meeting on December 13, 2006.

U.S. companies which are (1) not listed on a registered exchange; (2) have not made a public offering in the United States; and (3) have fewer than 300 U.S. resident investors at the time of application for a Rule 12g3-2(b) exemption can avoid having to register their securities and comply with Sarbanes-Oxley if they merely provide the SEC copies of the reports that they are required to file in their home country. It is important to note that even if a company has more than 300 U.S. resident investors, the company can still enjoy a Rule 12g3-2(b) exemption from registration so long as at the time of the company's application for an exemption, which might have occurred years earlier, the number of U.S. resident investors did not exceed 300. The Rule 12g3-2(b) exemption for foreign companies is easy to obtain and maintain assuming these requirements are satisfied.

As pointed out above, the availability of Rule 12g3-2(b) is conditioned on a company's security not being listed on a registered exchange. This fact has important implications for how a cross-border exchange, such as that between NYSE and Euronext, can be structured. If Euronext and the NYSE had created a common trading platform that constituted the new merged exchange (with the Euronext, NYSE and Archipelago markets no longer having an independent existence with separate trading platforms) this would make avoiding U.S. registration and Sarbanes-Oxley requirements far more difficult if not entirely impossible. This is due to the fact that a common trading platform would practically ensure that some non-trivial percentage of the trading would be deemed to occur in the United States thereby triggering the requirement to register the exchange with the SEC. If the surviving exchange had to register with the SEC then the previously Euronext-listed firms would then become firms listed on a registered exchange. Rule 12g3-b(2) would therefore no longer be available.

The necessity of avoiding having Euronext NV, or any of its subsidiaries, from having to register as a U.S. exchange has very important implications for the organizational structure of cross-border exchanges. The NYSE Euronext cannot create a common trading platform that would replace the NYSE, Archipelago and Euronext markets as this would render NYSE Euronext itself an exchange which would have to register with the SEC. As a result, all the firms currently listed on a Euronext market would be companies listed on a registered exchange for U.S. securities regulation purposes. Forcing cross-border exchanges to be effectuated by creating a holding company which in turn owns subsidiaries that are the pre-existing exchanges may well limit the ability of these mergers to fully realize cost-savings and maximize liquidity. This is in sharp contrast to the mergers that resulted in Euronext. While companies can still list on the Paris, Amsterdam, Lisbon, and Brussels markets, these markets do not have separate trading platforms. These four markets share a common trading platform.

Besides the SEC's public statements and Rule 12g3-2(b), there is a second line of defense against application of U.S. law to the Euronext market and its listed companies. In the NYSE – Euronext merger agreement, there is a specific provision that would trigger a break-up of the merger in the event that there is a U.S. law which imposes new regulatory burdens on a substantial proportion of non-U.S. companies listed on one of the Euronext markets solely because “the securities of such non-issuers are listed on a Euronext market; and such Euronext market is owned . . . by NYSE Euronext.” Interestingly, this provision explicitly states that if the non-U.S. firm can avoid the regulatory burden in question by complying with Rule 12g3-2(b) then a break-up of the merger will not be triggered

While the Euronext market and its listed companies will be spared the requirement to register with the SEC, and all the obligations that registration creates, Euronext-listed firms will

not entirely escape U.S. law. Foreign issuers could be subject, for instance, to potential liability pursuant to the anti-fraud provisions of the Exchange Act even if they do not have registered securities so long as they have U.S. resident investors. But this exposure is neither due to, nor will be aggravated by, the fact that an exchange merger has occurred.

There is another regulatory concern surrounding the NYSE-Euronext merger. An important motivation for the merger is the NYSE's attempt to enter the lucrative derivatives business. It is sometimes claimed that there are economies of scope in operating an equity market in conjunction with a derivatives market, such as the ability to offer investors the option of purchasing a covered call (which involves going long the stock while writing a put option on it). Euronext NV will have as a subsidiary Euronext UK which owns the LIFFE market, a derivatives market. One possible concern is whether the LIFFE market would continue to be regulated by the U.K.'s Financial Services Authority (FSA) or would the CFTC attempt to assert jurisdiction at some point?²⁴ The CFTC has permitted foreign derivative markets to place trading terminals in the U.S. through the issuance of no-action letters. Perhaps most notably, the CFTC has recently permitted the InterContinental Exchange to place trading terminals in the U.S. despite being regulated by the FSA. However, whether the CFTC will continue its liberal policy of issuing no-action exemptions from U.S. regulation, especially in light of lobbying by domestic derivative exchanges that wish to shut down this form of competition, is not entirely predictable.

V. CONCLUSION

The rapid transition of securities exchanges from member owned entities to publicly owned for-profit companies has highlighted and amplified many of the inherent, and long-

²⁴ See Roberta Karmel, *The Once and Future New York Stock Exchange*, Working Paper (2006).

standing, conflicts in having a private organization perform arguably governmental regulatory functions. The solutions adopted to minimize conflict between a profitable business model and unprofitable regulatory responsibilities have resulted in governance structures that promote independence of board members, at the potential expense of the member firms and the investors in the stock exchange.

This result creates interesting paradoxes. Historically, one of the rationales for self-regulation is the belief that industry involvement improves the quality and effectiveness of regulation, as members are “closer to the market”. However, the proposed structures emphasize policy making by independent board members, no longer “closer to the market”, with industry participation limited, in the NYSE structure, to an advisory role.

Similarly, the separation of regulatory functions from market operations, with separate boards setting policy, reduces the ability of the for-profit market entity to maximize shareholder value, as the regulatory entity will control the key decisions on the cost of regulatory operations. In effect this results in for-profit stock exchanges being out of step with the Sarbanes-Oxley goal of increased shareholder control by realigning board of director interests with shareholder interests.

A second emerging trend, globalization of stock exchanges beyond the authority of a single national regulator creates a difficult regulatory problem. Should a regulator that has accepted the principle that a stock exchange may be a for-profit entity, restrict potentially advantageous acquisitions in another country merely because it lacks the authority to directly regulate the acquired component? Or must the regulator look to alternative creative approaches to fulfilling its regulatory duties.

It can be argued that regulatory policy rarely leads but more often follows market innovations. As such, the challenge for regulators will be to develop regulatory programs that respond to globalized markets. There is in fact support for the argument that national regulators are moving in that direction through increased coordination among national regulators and convergence of regulatory programs along mutually acceptable principles.²⁵ IOSCO, the international organization of securities regulators, has vigorously promoted both greater cooperation and the development of commonly acceptable regulatory principles. The IOSCO multilateral memorandum of understanding (MLAT) providing for free exchange of information among regulators conducting investigations is one example of the trend toward mutual coordination of market oversight functions. The development of IFRS in Europe and the expectation that, if it becomes widely adopted and consistently interpreted in multiple countries, it will become a de facto global standard suggests the movement toward global regulatory standards, enforced nationally. Another example is the deference accorded by the U.S. SEC to home country disclosure standards for foreign companies, when conflicts exist with U.S. disclosure.

The NYSE Euronext transaction has clearly been structured to avoid provoking a premature and restrictive regulatory response to globalized markets. However, it is reasonable to assume that the current NYSE Euronext structure is not final and is likely to evolve. A for-profit company must strive to control costs as well as grow revenue. Consolidation of both markets onto common IT platforms is one obvious way to reduce costs and it may well be the first step to

²⁵ SEC Chairman Christopher Cox spoke on this subject and stated that “The way for each of us, as national regulators, to maintain robust investor protections while building healthy international markets is first, to adopt strong regulatory regimes at home that are cost-justified; and second, to cooperate with our fellow securities regulators abroad to implement agreed-upon regulatory objectives on a global level.” Available at <http://www.sec.gov/news/speech/2006/spch111606cc.htm>

full consolidation.²⁶ If it passes regulatory muster, one can envision a proposal to merge market surveillance functions of the NYSE and Euronext, as it would both reduce costs and presumably improve the effectiveness of market surveillance. If acceptable, it seems reasonable that a plan to fully merge both markets could be developed, with a mutual agreement by the relevant home country governmental regulators to jointly perform regulatory functions.

Admittedly, this is pure speculation. But the events of the last ten years have demonstrated the speed of market innovation and one must assume that, in a for-profit environment, the imperative to innovate will only accelerate.

²⁶ In a speech this summer, SEC Commissioner Annette Nazareth, a former Director of Market Regulation at the SEC, suggested that this next step would be likely. Available at <http://www.sec.gov/news/speech/2006/spch062006aln.htm>

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